Hytera

Respond & Achieve

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Hytera

Fast Deployment Communication Solutions

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E-center

Narrowband Ad-hoc Solution

E-pack200

E-pack100

E-pole200

E-pole100

Broadband Ad-hoc Solution

E-mesh580P

PNE380

LTE system(iBS)

iBS

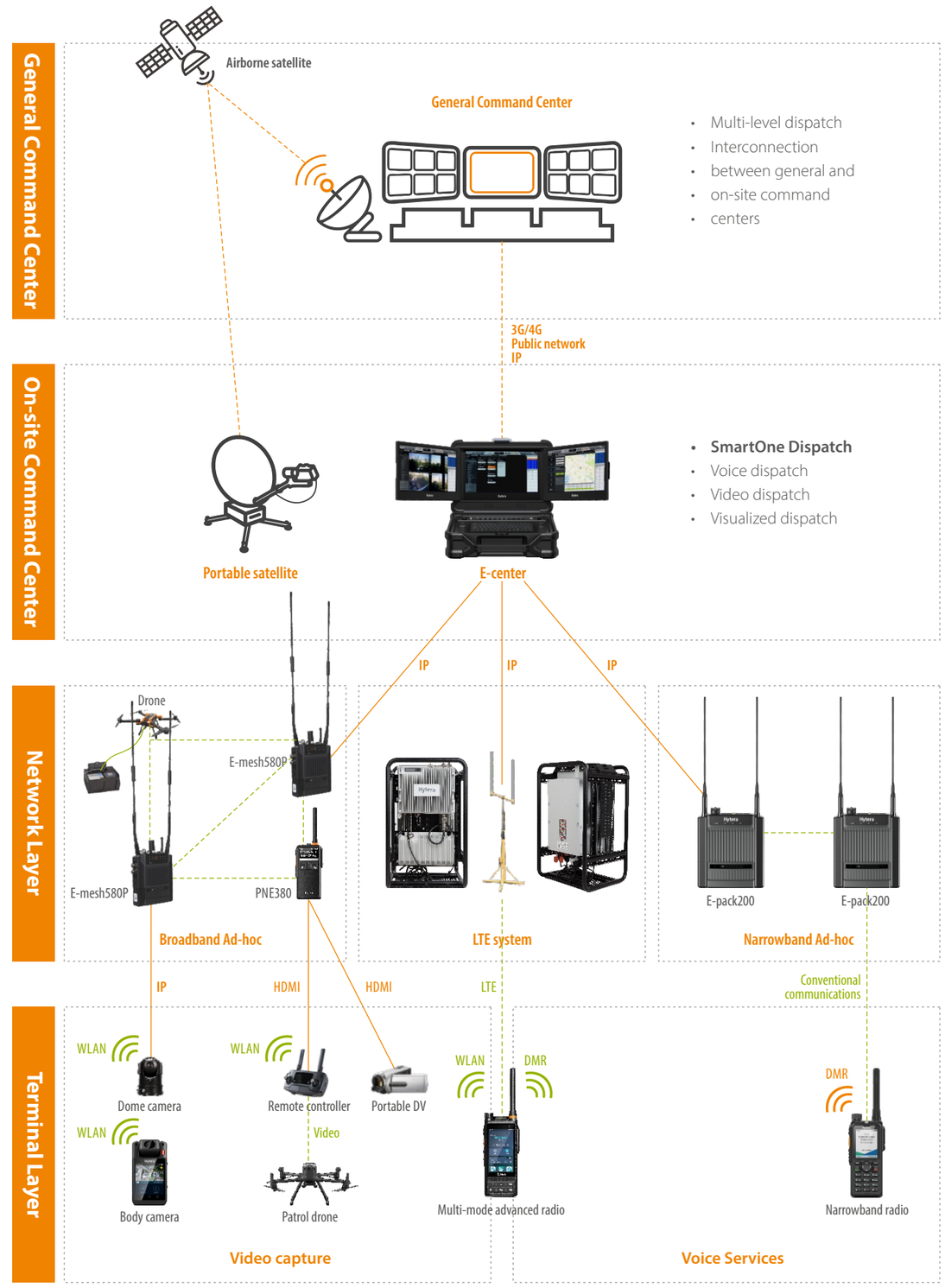
Fast Deployment Communication Solutions Overview

Hytera's Fast Deployment communication system is oriented to the emergency command and dispatch requirements of major events in network blind areas, and remote areas with weak infrastructure, and provides a complete set including broadband and narrowband ad-hoc network equipment, portable command center equipment, dispatching software, and LTE integrated rapid deployment solutions and products, Provide stable signal coverage on site or in a specific area, ensuring unobstructed voice, video, positioning and other data services to meet user needs daily and emergency communication needs of households.

Highlights

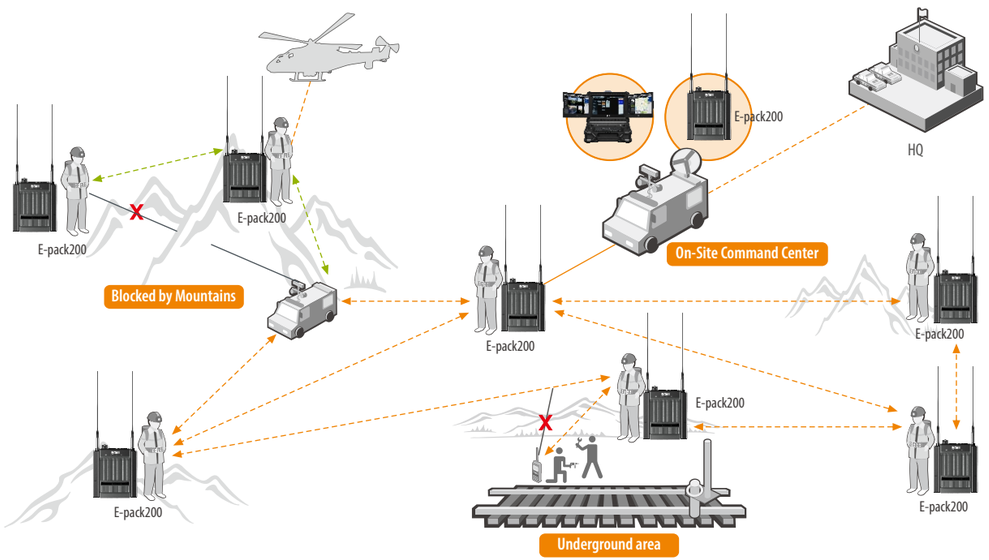
- Fast deployment, rapid application
- Multi-network integration, collaborative command
- Using the public network for link supplementation and backup
- Flexible networking, dynamic topology
- Broadband and narrowband fusion application

Fast deployment communication solution



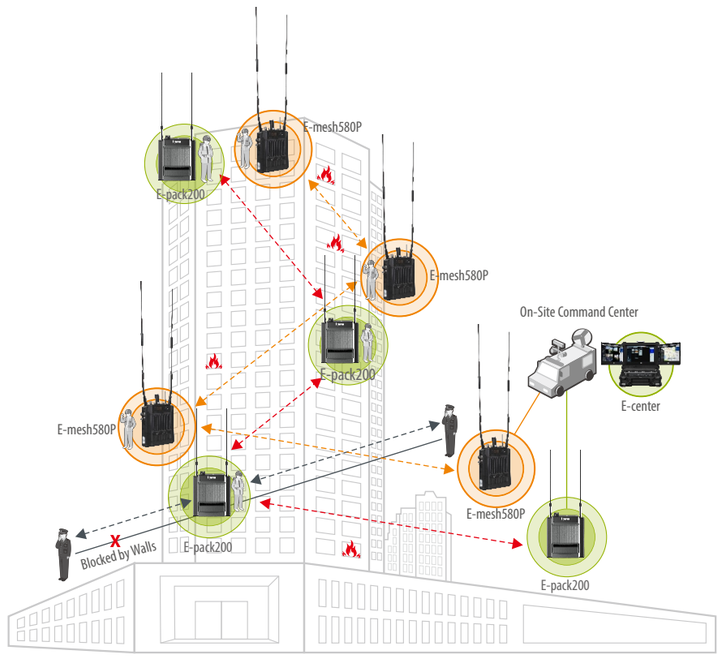
Natural Disaster Rescue

The network coverage of the disaster site is carried out through E-pack or E-Mesh to form a reliable rescue emergency communication network and meet the communication coverage requirements of the complex environment of the rescue site. Deploy the on-site command center at the rescue site, and realize interconnection with the Headquarters command center through the public network, cable network, satellite network, etc., to realize the collaborative command of the on-site command center and Headquarters command center.



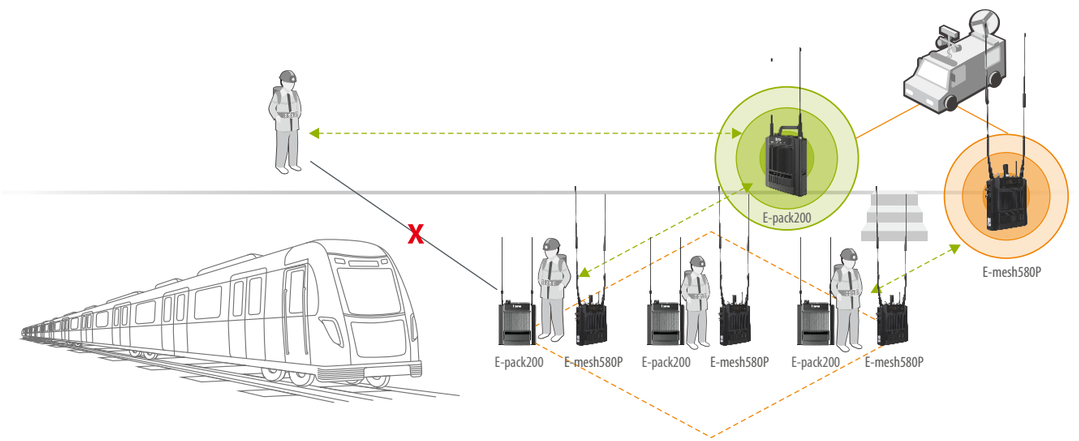
High-rise Building Rescue

In high buildings, a three-dimensional broadband and narrowband network coverage in the whole area is formed by deploying E-pack and E-Mesh networking equipment. The E-center is configured on the fire communication command vehicle to conduct on-site command of the rescue work and carry out the rescue work quickly according to the real-time feedback audio and video.



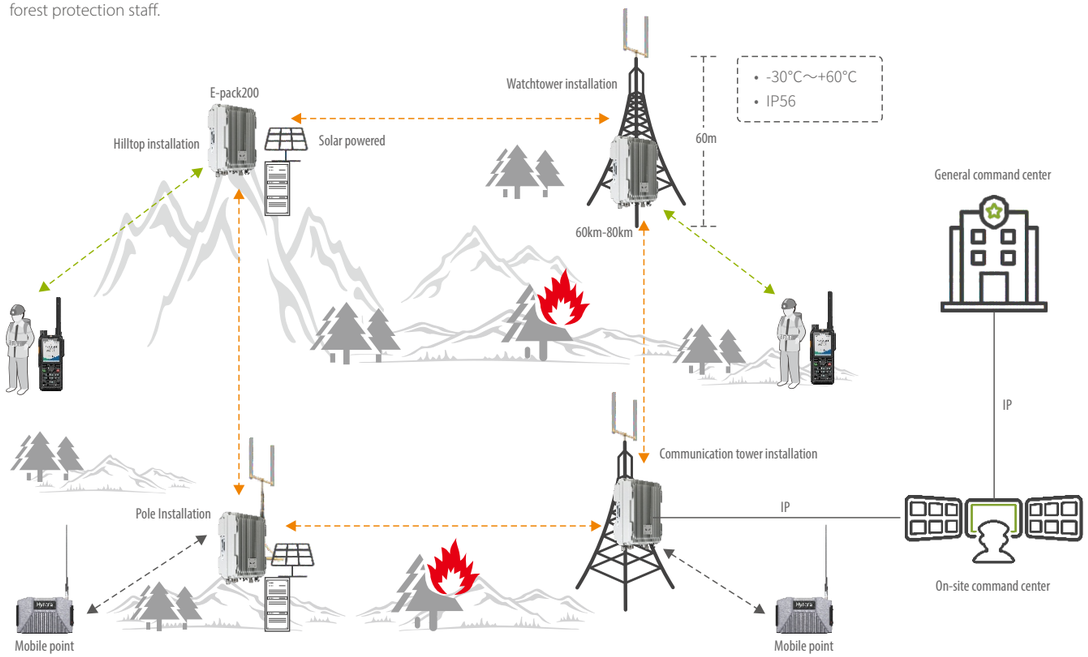
Underground Construction Rescue

E-pack and E-mesh are deployed underground, establishing temporary network coverage through a multi-hop ad-hoc network, and can communicate with the on-site command center at the same time.



Forest Fire Rescue

In the vast forest area, when there is no communication signal at the fire scene, through the on-site self-organizing network, the effective connection between the front line of the fire scene, the front-line headquarters and the general headquarters is realized, and the audio and positioning are ransmitted back to the headquarters in real time, realizing long-distance Mobile command, but also provide call and location reporting for daily mountain patrol and forest protection staff.



On-site Dispatch Console

E-center

E-center is an on-site command and dispatch center to provide an immediate on-site response. The three-screen design integrates command & control, map, and video surveillance to provide the most comprehensive information possible in a visual manner, it also supports multiple links to interconnect with the command center in the rear area for collaboration. E-center can be used as on-site command center in multiple emergency scenarios such as firefighting, flood, earthquake and typhoon, etc.

Highlights

- Portable design, light and easy to use
- Three-screen display, map, video, command and dispatch synchronous application, providing emergency on-site command and dispatch function
- Able to access various conventional and trunking systems, and realize network interconnection through narrowband, GSM, 3/4G, WLAN, satellite and other ways
- Simple operation, convenient for system operation in complex environments
- Multiple power supply methods: mains power, generator, vehicle power supply and backup battery
- Highly-integrated

E-center

Intuitive Visual Display

Information such as equipment, personnel location and equipment status are marked on the GIS map in real-time, and a map can intuitively grasp resource deployment.

Flexible Voice Call

One-click instant calling, rapid establishment of temporary meeting rooms, and fast multi-network voice communication.

Controllable On-site Video Surveillance

It can carry out remote control of the video PTZ, realize multi-view viewing, support broadband ad-hoc network video return and multiple video stream inputs.

Instant Alarm Reminder

Alarm calls for help, equipment alarms, and link alarms can be monitored in real-time, and abnormal conditions on site can be obtained immediately.

Intelligent Network Management

Shorten the operation steps of equipment and personnel management, real-time deployment and real-time application.

Specifications

Battery voltage	14.8V(rated)
Battery capacity	185Wh
Working power consumption	<100W
Charging time	3H
Battery life	4H
PoE	802.3 at PoE power supply

WLAN	2.4G
Dimensions(L*W*D)	48.5 cm x 35.6 cm x 16 cm
Weight	15KG(with battery)
Ethernet port(WAN)	10/100M, adjustable
Ethernet port(LAN)	10/100/1000M, adjustable

Narrowband Ad-hoc Solution

Dual-channel DMR Ad-hoc Portable Repeater

E-pack200

Hytera E-pack200 is a huge leap of wireless ad-hoc network (WANET) repeater, which is designed to provide dual communication paths simultaneously and precise positioning services, providing all-round networking solution for those engaged in firefighting, disaster relief, VIPs security, public safety management, and more.

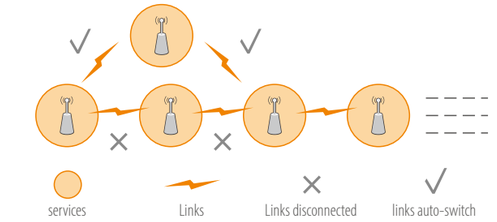
The E-pack200 repeater can operate on a custom frequency within the preset frequency range, thus improving the efficient usage of channel resources. incorporated with precise positioning technology, the E-pack200 repeater can periodically report its location data.

Highlights

- Support 2-way ad-hoc communication, up to 31 nodes
- The location data of terminals and networking equipment can be reported periodically
- Support wireless interconnection with command and dispatch center through 4G link
- GSM Link as Backup, When the distance is too far to realize a self-organizing network, a GSM link can be used to create a network
- Support IP wired interconnection
- Support WLAN programming
- Efficient and flexible networking mode

Fast Deployment

After a base station fails, it will automatically search for connectable devices to form a network (the bearer can move and cooperate). When a node in the network fails, other surrounding nodes will automatically supplement and complete the network intercommunication of the entire system.

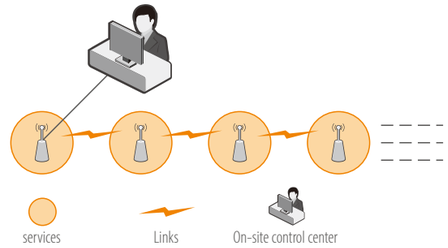


Flexible Ad-hoc Networking

Up to 31 E-pack200 repeaters can be deployed on the site to form a chain, mesh, or hybrid network, which can effectively eliminate dead spots in tunnels, high-rise buildings, or underground to ensure seamless communications.

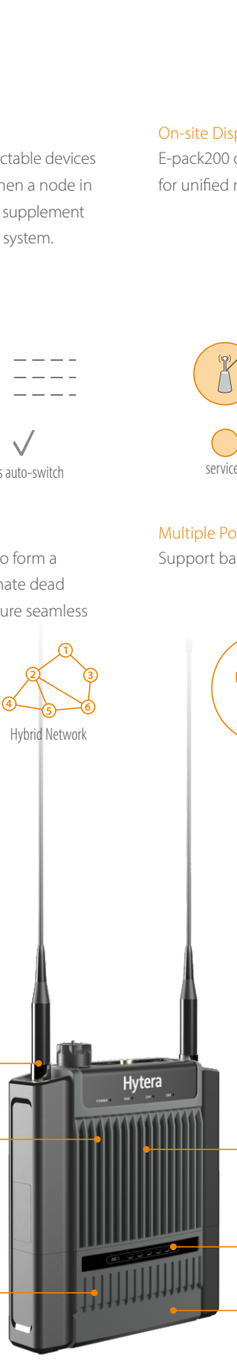
On-site Dispatch Center

E-pack200 can be connected to the on-site dispatch center at any node for unified management and central dispatch.



Multiple Power Supply

Support battery power supply, vehicle power supply, solar power supply.



More antennas than you see

- Visible dual narrowband antennas
- Built-in LTE antenna, WLAN antenna, and GPS antenna

Purpose-built design

- Sleek form factor with aluminum alloy housing
- Good tactility with plastic on both sides
- High-performance cooling with large-area heat sink gears

Rugged design

- Waterproof and dustproof: Ip67
- Operating temperature: –30℃ to 60℃
- Shock and vibration: MIL-STD-810 C/D/E/F/G

Easy to carry

- Dimensions: 211 mm × 62 mm × 235 mm
- Weight: 3.1 kg

One-touch to view remaining battery power

Various power supplies

- 148 Wh battery: 9 hours at room temperature, push-pull design
- Mains power
- Vehicle power
- Solar energy

Specifications

Private network mode	DMR
Node capacity	31
Frequency range	350-400MHz, 400-470MHz
Battery	148Wh
Power output	1W/5W/10W, adjustable

Vocoder type	AMBE+2™/NVOC
Channel spacing	12.5kHz
Antenna impedance	50Ω
Dimensions(H × W × D) mm	235 mm × 211 mm × 62 mm
Weight	3.1Kg

DMR Ad-hoc Portable Repeater

E-pack100

Hytera E-pack is intended for fast and flexible communication system deployment. The E-pack can not only be used as a radio to make and receive calls, it also can create a wireless mobile ad hoc network to route voice. As Hytera IP (Intellectual Patent), the E-pack function as a radio, repeater and ad-hoc node with one frequency, highly saving frequency resources. With a light, small and IP67 design, the E-pack can be installed in a vehicle, carried by a backpack, pole-mounted, or wall mounted fairly suitable for temporary communication or indoor coverage.

Highlights

Wireless Mobile Ad-hoc Networking

Hytera E-pack can create a wireless mobile ad-hoc network, in which there are maximum 31 nodes. The ad-hoc network is self-configuring and dynamic in which E-pack nodes are free to move.

Fast Deployment

Based on wireless mobile ad-hoc networking, Hytera E-pack is capable of creating and joining networks to deploy the communication system as soon as it is powered on.

Highly Reliable Networking

If one E-pack node moves away from the network or malfunctions, voice will automatically route to another E-pack node in order to guarantee link continuity.

High Spectrum Efficiency

Based on TDMA and FDMA technology, one frequency can be used to make calls and route voice at the same time, greatly saving frequency resources.

GSM Link as Backup

When the distance is too far to realize a self-organizing network, a GSM link can be used to create a network.

Product Introduction

Specifications

Private network mode	DMR
Node capacity	31
Frequency range	136-174MHz, 410-470MHz
Battery life	>10H
Power output	5W/10W/20W, adjustable

Vocoder type	AMBE+2"/NVOC
Channel spacing	12.5kHz
Antenna impedance	50Ω
Dimensions(L × W × D) mm	295mm × 187mm × 68mm
Weight	3.6Kg

Dual-channel DMR Ad-hoc Repeater

E-pole200

E-pole200 adopts wireless interconnection technology to provide narrowband ad hoc multi-hop links through cascading to realize wide range voice, data and other business coverage functions. E-pole200 is a portable automatic networking communication device that can be used in all weather and all terrains without relying on any external equipment and communication network. This equipment solves the problem of wired network construction and wiring, and greatly saves maintenance costs.

Highlights

- Two-way ad-hoc communication
- Up to 31 nodes
- Location upload periodically both terminals and networking equipment
- Wireless interconnection with command and dispatch platform through 4G link
- GSM Link As Backup, the GSM link can be used for network communication
- Support IP interconnection
- Support WLAN programming
- Fully compatible with DMR portable terminals
- Various installation methods such as portable, vehicle-mounted and wall-mounted
- Multiple power supply such as battery power supply, vehicle power supply, solar power supply, etc.

Specifications

Private network mode	DMR
Node capacity	31
Frequency range	350-400MHz, 400-470MHz
Power input	DC 48V
Power output	1W/5W/10W, adjustable
Vocoder type	AMBE+2"/NVOC

Channel spacing	12.5kHz
Antenna impedance	50Ω
Dimensions(H × W × D) mm	238.0 mm × 330.9 mm × 138.2mm
Weight	5Kg
Operating temperature	-30℃~+60℃
Dust & Water protection	IP65

DMR Ad-hoc Repeater

E-pole100

E-pole is a fixed narrowband Ad-hoc network device. With pole/wall-mounted installation design, it can be easily installed on street lamps or buildings, providing long-term and stable large-area wireless communication coverage guarantee, and solving the problem of wired network construction and wiring.

Highlights

- Up to 31 nodes, one-way voice
- Fully compatible with DMR portable terminals
- Various installation methods such as portable, vehicle-mounted and wall-mounted
- Multiple power supply such as battery power supply, mains power supply, vehicle power supply, solar power supply, etc.
- GPS Positioning upload with voice
- GSM Link As Backup, the GSM link can be used for network communication

Specifications

Private network mode	DMR
Node Capacity	31
Frequency range	136-174MHz, 410-470MHz
Power input	AC 90V~264V/DC 13.5V~16.5V
Power output	5W/10W/20W, adjustable
Vocoder type	AMBE+2"/NVOC

Channel spacing	12.5kHz
Antenna impedance	50Ω
Dimensions(H × W × D) mm	316mm × 223mm × 133mm
Weight	7.3Kg
Operating temperature	-30℃~+60℃

Broadband Ad-hoc Solution

Broadband Mesh Portable Device

E-mesh580P

Hytera E-mesh580 is the new-generating broadband wireless ad-hoc network device, which is designed to quickly establish a reliable network especially when the public network is down. It provides wider communication coverage to ensure stable connectivity for public safety, major events, emergency response, field operation, and more.

What the E-mesh580P does is to fight side by side with front-line personnel. Powered by the intelligent platform, the E-mesh580P has an amazing networking capability from high throughout to stable transmission ink, from relay to versatile network topologies. Moreover, the P67-Rated E-mesh580p can survive any harsh environment, and the long-lasting battery keeps the network services always on.

Unprecedented usability is built in the E-mesh580P, the compact and lightweight design makes the E-mesh580P easier to carry, the E-mesh580P allows users to get information quickly through the 0LED display, LED indicator, or beep alert, the voice group call services let users stay connected with each other on the scene for better collaboration during deployment Plus, the E-mesh580P is highly scalable from open APIs to diverse interfaces.

Highlights

- UP to 32 nodes,the throughput of 8-hop network is greater than 16Mbps
- Long communication coverage and long battery life
- Multiple working modes to adapt to different electromagnetic environments
- Support intelligent frequency selection, dynamic frequency hopping, strong anti-interference ability
- Easy to carry and deploy, supports deployment methods such as backpack, vehicle, and airborne
- Independent of infrastructure, support multiple power supply methods
- End-to-end QoS and security encryption, multiple security guarantees
- Abundant business interfaces and strong function scalability

Rich interfaces

- WLAN/BT antenna connector
- GNSS antenna connector
- LTE antenna connector
- Dual RF antenna connectors
- Power inlet
- Aviation port 1 (can be adapted to dual Ethernet interfaces or optical port)
- Aviation port 2 (can be adapted to USB port, RS485 port, 12 V DC outlet, or HDMI)
- 3.5 mm audio jack

Easy to carry and deploy

- 211 mm x 239.9 mm x 70.7 mm (without the plug)
- Less than 3.5 kg (with the battery)
- Hide-able multifunctional handle
- Deployable on the back, vehicle, or airplane

Intuitive and audible

- OLED display
- Touchable power level indicator
- Functional keys
- Alerts for low power, abnormal link, IP conflict, or more

Stylish yet sturdy

- Magnesium-aluminum alloy case
- State-of-the-art craftsmanship
- Anti-corrosion, anti-drop, and anti-heat

Various power supplies

- 148 Wh cryogenic battery (14-hour conventional services, push-pull design, fast-charging)
- Mains power
- Vehicle power
- Solar energy

Specifications

Frequency Range	512–582 MHz, customizable
RF Path	2T2R(2 Independent RF Chains)
Bandwidth	5 MHz, 10 MHz, 20 MHz
TX Power	2 x 5 W (typical)
RX Sensitivity	≤ -105 dBm@10 MHz
Operating Voltage	12–24 V DC

Operating Time	> 14 hours (conventional services)
Weight	< 3.5 kg (with the battery)
Dimensions (W × H × D) mm	211 mm × 239.9 mm × 70.7 mm (without the plug)
Operating Temperature	-30°C to +55°C
IP Rating	IP67

Broadband Mesh Handheld Node

PNE380

Broadband ad-hoc network technology is increasingly becoming an urgent need for industry-specific communications. PNE380 is a broadband ad-hoc network handheld platform independently developed by Hytera that integrates voice, data, video, and intelligent services. With high integration, strong processing capability, low power consumption, small and light Convenience, rich interfaces, safety and controllability; also it supports a multi-band independent frequency selection function, strong anti-interference ability; and adapt to various harsh working environments, the PNE380 is your reliable partner you can count on at critical moment.

Highlights

- Light and portable
- High throughput, up to 50Mbps
- Support 32-nodes
- IP67
- Support independent or hybrid networking, rich application scenarios
- Low power consumption platform, more than 24 hours (standby time)

Specifications

Screen	LED 1.3', 128 x 64
Dimensions	137.5 x 60 x 27.8 mm
Weight (including battery and Antenna)	288g
Frequency	Mesh: 512~582 & 1430~1444MHZ, The other customized frequency

Transmit Power	0.5w (typical), 0.75W (max)
Bandwidth	5/10/20MHz, the other customized bandwidth
Throughput	50Mbps (max)
Operating Temperature	-20℃~+55℃

LTE Fast deployment solution

LTE Integrated Base Station

iBS

The LTE integrated base station system is a solution to provide LTE communication coverage for users in the private network industry. It is called the LTE rapid deployment system. It can be quickly transported to the site, deployed flexibly, and operates stably in various harsh environments. The LTE base station is integrated with the APP server, and the converged communication platform runs on the APP server to provide multimedia communication scheduling of voice, image and video. It is waterproof, sand proof, and shockproof, and is suitable for communication protection in harsh environments.

Highlights

Highly integrated

integrates the eNodeB baseband unit (BBU), remote radio unit (RRU) and Evolved Packet Core (EPC) into one single box.

High reliability

IP66, suitable for working in harsh outdoor environments.

Easy to operate

Fast deployment within 15 minutes. With the integration of the communication platform, it can independently provide voice, video and other communications.

Fast reach

Shock-resistant, dust-proof, and waterproof design, it can meet the requirements of fast delivery in various scenarios.

Flexible deployment

Support vehicle installation, outdoor fixed-point installation, mobile and portable and other usage scenarios.

Specifications

Item	Specification
Frequency	B20, B28, B31
Bandwidth	5MHz/10MHz/15MHz/20MHz
MIMO	2T2R
RF Power	2 x 20W
Cascading	4 iBS
Dimension(H × W × D) mm	430 mm × 485 mm × 665 mm
Weight	<58 kg
Power Consumption	< 350w
Operation Temperature	-40℃~+60℃
Ingress Protection Rating	IP 66 (without cover)

APP server Specification

Application Server		Specification
Platform	Processor	I7-8665UE
	Max. Frequency	4.40 GHz
	Chipset	Intel 300Series Chipset
Memory	Technology	DDR4-2400
	Capacity	32GB
Graphics	Controller	Intel UHD GFx 620
	Max. Frequency	1.15GHz
Storage	M.2 SSD	500G
Power Consumption	Power Consumption	< 100w

Full Outdoor Power System

The outdoor waterproof power system includes the power supply units (PSU) and the lithium batteries. It is highly efficient, compact, lightweight, easy to install, and does not require parameter configuration or maintenance. The power system is designed as a base station system for outdoor scenarios.

This product is easy to transport and use and can be quickly taken out from the trunk of the vehicle. It can be used directly on-site and truly respond to the demand of emergency power supply on-site.

Highlights

- Large-capacity battery, more than 6 hours of battery life
- Fast charging, fully charged in 5 hours
- IP65 waterproof, suitable for outdoor harsh environment

Specifications

System	Specification
dimension	430 mm × 485 mm × 665 mm
weight	48kg

Product	Battery unit
System indicator	
Capacity	2400 Wh
Environmental indicator	
Protection level	IP65
Operating temperature	–40℃~+55℃

Product	PSU Unit
System indicator	
Rated power/capacity	1500 W
Environmental indicator	
Protection level	IP65
Operating temperature	–40℃~+55℃
Power Input	
Input voltage	AC: 90~280 V AC
AC input	1×220 V/1×15 A
Load output	
Output Power	1500 W
Output voltage	220 V AC
AC output	3 × 15 A

Antenna System

Vehicle-mounted antenna lifter, used to quickly and smoothly adjust the antenna to the specified height. The lift structure is firm and easy to operate. Install the lifter on the rear of the vehicle through simple modification, suitable for different types of vehicles. In places where there are no vehicles, the aerial lifter can also be easily erected on the ground.

Highlights

- Quick set up, deployment within 15 minutes by 2 people
- Can be raised up to 8 meters, large gain antenna, long coverage distance

Specifications

Freq. Range-MHz	703-803 MHZ
Gain-dBi	8.6dbi
Antenna Size	2692 mm × 114 mm × 114 mm
connector	Din-F
Radome material	fiberglass
Temperature	-40°C ~ +70°C

Antenna Lifter	
Deployment	Vehicle or Ground
Extension height	8m±200mm
Transportation height	1.7m±20mm
Weight	2 boxes: 76kg&74kg